

ABSTRACT

Disclosed is a video transcoding apparatus converting a specific bit rate of an MPEG(moving pictures experts group) bit stream into a different rate thereof for transportation. The present invention includes a video pre-processing unit having a predetermined matrix structure and down-sampling a macro block decoded by the video decoder by transforming the macro block into a corresponding picture structure to the compressed video bit stream, a transcoding parameter control unit detecting information about a picture from a previous bit stream variable-length-decoded by the video decoder and setting up an encoding mode for a transcoding in accordance with the detected information, etc. Therefore, the present invention does not need the motion estimation unit of encoder and reduce the complexity of the bit allocation unit. When changing HD-rated MPEG sequence over 10Mbps into NTSC-rated MPEG sequence below 6Mbps, the present invention reduces calculation time and complexity of hardware.